

ABSTRACT OF THE DISCLSOURE

METHODS AND APPARATUS FOR SELECTING
5 PROCESSES FOR EXECUTION

Mechanisms and techniques operate in a multiprocessing computer system having a plurality of processing devices and provide an affinity-based wakeup locality successor selection process that can identify processes to be executed by a 10 kernel by detecting when a first process executing on a first processing device releases access to shared data. In response to the first process releasing access to the shared data, embodiments attempt to identify a second process that i) formerly executed on the first processing device and that ii) is awaiting access to the shared data. Embodiments provide, to a kernel responsible for selecting processes to execute 15 amongst the plurality of processing devices, an identification of the second process as a process that is ready for execution in the multiprocessing computer system. Such embodiments can operate in an execution environment such as a Java Virtual Machine.